

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2005/001664

## A. CLASSIFICATION OF SUBJECT MATTER

## IPC7 H01J 1/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 H01J 1/30, H01J 1/02, H01J 1/62, H01L 21/338

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean Patents and Applications for inventions, since 1975Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
KIPASS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5850120 B (NEC CORP.) 15 Dec. 1998 see the whole document	1-24
A	US 2002/0036599 A (Michiyo Nishimura) 28 Mar. 2002 see the whole document	1-24
A	US 5864147 B (NEC CORP.) 26 Jan. 1999 see the whole document	1-24
A	US 5945777 B (St. Clair Intellectual Property Consultants, Inc.) 31 Aug. 1999 see the whole document	1-24

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
09 SEPTEMBER 2005 (09.09.2005)

Date of mailing of the international search report

09 SEPTEMBER 2005 (09.09.2005)

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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/KR2005/001664

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5850120 B	15-12-1998	FR 2737041 A JP 9-22650 A KR 266517 B TW 413828 B	24-01-1997 24-01-1997 15-09-2000 01-12-2000
US 2002/0036599 A	28-03-2002	CN 1363944 A JP 14-169505 A KR 2002-23670 A	14-08-2002 14-06-2002 29-03-2002
US 5864147 B	26-01-1999	KR 1998-5145 A JP 10-12127 A	30-03-1998 16-01-1998
US 5945777 B	31-08-1999	NONE	